

ABSTRACT

It comprises a voltage-application apparatus 2 for applying a predetermined voltage to a semiconductor device 1, and holding it therein; a laser apparatus 3 for generating a laser beam 4 having a predetermined wavelength; an irradiation apparatus 5 for irradiating the laser beam 4 onto the two-dimensional circuit of the semiconductor device 1, which is held in the applied state, so as to scan it two-dimensionally; an electromagnetic-wave detection/conversion apparatus 6 for detecting an electromagnetic wave, which is radiated from the laser-beam irradiation position, and converting the electromagnetic wave into an electric-field signal, which changes temporally; and phase-judgement means 71, to which the temporally-changing electric-field signal output from the detection/conversion apparatus 6 is input, for judging the phase of the electric-field signal.